

Title (en)
EXHAUST GAS CLEANING SYSTEM EQUIPPED WITH POWER GENERATION FUNCTION

Title (de)
ABGASREINIGUNGSSYSTEM MIT ENERGIEERZEUGUNGSFUNKTION

Title (fr)
SYSTÈME DE PURIFICATION DES GAZ D'ÉCHAPPEMENT ÉQUIPÉ D'UNE FONCTION DE PRODUCTION DE PUISSANCE

Publication
EP 3276725 A4 20181010 (EN)

Application
EP 16768367 A 20160304

Priority
• JP 2015058976 A 20150323
• JP 2016056844 W 20160304

Abstract (en)
[origin: EP3276725A1] The system comprises a steam reforming unit to produce hydrogen from exhaust gas supplied, a hydrogen permeable membrane to allow only hydrogen produced by the steam reforming unit to pass through it, a hydrogen storage unit to absorb hydrogen supplied through the hydrogen permeable membrane and release absorbed hydrogen, a fuel cell to generate power using hydrogen supplied from the hydrogen storage unit, a gas clean-up unit to clean up residual gases delivered not passing through the hydrogen permeable membrane, and a control unit to control the hydrogen storage unit to absorb or release hydrogen depending on whether the fuel cell is supplied with sufficient hydrogen.

IPC 8 full level
H01M 8/04 (2016.01); **C01B 3/00** (2006.01); **C01B 3/34** (2006.01); **F01N 3/24** (2006.01); **H01M 8/0612** (2016.01)

CPC (source: EP US)
C01B 3/0031 (2013.01 - EP US); **C01B 3/0042** (2013.01 - EP US); **C01B 3/065** (2013.01 - US); **C01B 3/34** (2013.01 - EP US); **C01B 3/508** (2013.01 - US); **F01N 3/24** (2013.01 - EP US); **H01M 8/04** (2013.01 - EP US); **H01M 8/0612** (2013.01 - EP US); **H01M 8/0618** (2013.01 - US); **C01B 2203/0233** (2013.01 - EP US); **C01B 2203/0405** (2013.01 - EP US); **C01B 2203/0435** (2013.01 - EP US); **C01B 2203/066** (2013.01 - EP US); **C01B 2203/1657** (2013.01 - EP US); **C01B 2203/1685** (2013.01 - EP US); **C01B 2203/169** (2013.01 - US); **Y02E 60/32** (2013.01 - EP US); **Y02E 60/36** (2013.01 - EP US); **Y02E 60/50** (2013.01 - EP)

Citation (search report)
• [X] US 2006063046 A1 20060323 - HU HAORAN [US], et al
• [Y] US 2006108160 A1 20060525 - HOTTO ROBERT [US]
• [Y] US 2007278795 A1 20071206 - BERKSON BRUCE R [US]
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• [A] US 5422085 A 19950606 - BELL JAMES A E [CA], et al
• See references of WO 2016152464A1

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)
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